

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-2. (canceled).

3. (currently amended) A mineral wool blanket or mineral wool mat of cross-linked mineral wool fibers ~~including a density distribution across the thickness (z);~~

~~the an~~ upper portion (24b) and ~~the a~~ lower portion (24b), ~~of said mineral wool blanket or mineral wool mat~~

each of said upper and lower portions being fiberized and exhibiting a density higher than that of a middle ~~the~~ portion (56) located between said upper portion and said lower portion; ~~and fiberizing the raw material in at least one fiberizing mean (26, 26b);~~

each of said upper portion and lower portion ~~of said mineral wool blanket or mineral wool mat~~ being deposited in a collection conveyor (16) of a shroud (10) for forming a primary nonwoven in the form of a nonwoven mineral wool blanket or nonwoven mineral wool mat (24), said nonwoven ~~and~~ including

two layers exhibiting identical properties as regards one of a ~~the~~ fiber quality ~~and/or the~~ and a binder content, and

the two layers exhibiting identical density gradients,

wherein ~~the~~ a density distribution of said middle portion (56) is constant, and a density distribution across a the thickness (z) moving from the middle portion (56) to edges of the upper and lower portions (24a, 24b) is increasing and a mirror-image with respect to the middle portion ~~of the blanket or the mat comprise in the portion (56) located between said upper portion and said lower portion a value of constant density and that the said density distribution increases in the upper and lower portion (24b) like a mirror-image, and~~

wherein the mineral wool blanket or mineral wool mat has a density in the range of 4 to 70 kg/m³.

4. (currently amended) Mineral wool blanket or mat according to claim 3, wherein the density distribution in the middle portion (56) ~~located between said upper portion and said lower portion~~ exhibits a minimum value and ~~exhibits a maximum value in the~~ a border portion of the upper and the lower portion (24b) exhibit a maximum density.

5. (canceled).

6. (original) Mineral wool blanket or mat according to claim 3, wherein the thickness of said mineral wool blanket or mineral wool mat is in the range of 50 to 500 mm.

7. (currently amended) Mineral wool blanket or mat according to claim 3, wherein said upper portion (24b) and said lower portion (24b) of said mineral wool blanket or mineral wool mat comprises in each case a higher binder content than the middle portion.

8. (original) Mineral wool blanket or mat according to claim 3, wherein the binder content in said upper portion and said lower portion is roughly 1% to 4% above the average binder content.

9. (currently amended) Mineral wool blanket or mat of cross-linked mineral wool fibers ~~including a density distribution across the thickness (z)~~ according to claim 3, wherein,

the average density is in the range 4 to 11 kg/m³, and
~~whereby~~

said blanket or mat comprises homogenous mass distributions in a transverse direction ~~transversely~~.

10. (original) Mineral wool blanket or mat according to claim 5, wherein the density is 4 to 25 kg/m³.

11. (original) Mineral wool blanket or mat according to claim 6, wherein the thickness is in the range of 120 to 360 mm.

12. (original) Mineral wool blanket or mat according to claim 8, wherein the binder content is 1% to 2% above the average binder content.

13. (original) Mineral wool blanket or mat according to claim 9, wherein the average density is 4 to 9 kg/m³.

14. (original) Mineral wool blanket or mat according to claim 10, wherein the average density is 4 to 6 kg/m³.

15. (currently amended) A mineral ~~Mineral~~ wool blanket or mat produced by the following method of claim 1 steps:

fiberizing the raw material in at least one fiberizing means (26a, 26b);

depositing the fibers on a collection conveyor (16) of a shroud (10) for forming a primary nonwoven (24);

slitting said primary nonwoven in longitudinal direction so that a first blanket section (38) and a second blanket section (40) materialize;

transporting said first blanket section (38) and said second blanket section (40) such that the conveying distances between shroud and curing oven are longitudinally staggered;

inverting said first blanket section (38) so that the underside of said first blanket section (38) is located upwards;

and

depositing said first blanket section (38) on said second blanket section (40) to form a secondary nonwoven (52), wherein the mineral wool blanket or mineral wool mat has a density in the range of 4 to 70 kg/m³.

16. (new) A nonwoven mineral wool blanket or mat, comprising:

a centerline separating an upper portion (24b) and a lower portion (24b),

each of the lower and upper portions being of fiberized mineral wool fibers and together forming a two layer nonwoven product in the form of a mineral wool mat or blanket (24), wherein,

the two layers exhibit identical fiber quality and bind content properties,

the two layers exhibit identical density gradients,

a density gradient across an overall thickness (z) of the is symmetrical with respect to the centerline, and

a density of the product across the overall thickness ever increases from the middle of the product to outer edges of the upper and lower portions (24a, 24b).

17. (new) The blanket or mat of claim 16, wherein, the density is in the range of 4 to 70 kg/m³.